What is claimed is:

1.   A method comprising:

2.   making a first determination, based on first feedback generated during execution of a

3.   program, the first determination to indicate whether the size of a compiled code cache should

4.   be modified;

5.   making a second determination, based on second feedback generated during execution of

6.   the program, the second determination to indicate whether the size of a heap should be

7.   modified; and

8.   modifying a shared storage region based on the first determination and the second

9.   determination.

1

1.   2.   The method of claim 1, wherein modifying the shared storage region based on the

2.   first determination and the second determination further comprises:

1.   increasing the size of the shared storage region if:

2.   the first determination indicates that the size of the compiled code cache should be

3.   increased; and

4.   the second determination indicates that the size of the heap should be increased.

1

1.   3.   The method of claim 1, wherein modifying the shared storage region based on the

2.   first determination and the second determination further comprises:

1.   decreasing the size of the shared storage region if:

2   the first determination indicates that the size of the compiled code cache should be

3   decreased; and

4   the second determination indicates that the size of the heap should be decreased.

1

1   4.   The method of claim 1, wherein modifying the shared storage region based on the

2   first and second determinations further comprises:

3   if the second determination indicates that the size of the heap should be increased,

4   modifying allocation of the shared storage region to increase the size of the heap.

1

1   5.   The method of claim 4, wherein modifying the shared storage region based on the

2   first and second determinations further comprises:

3   if the second determination indicates that the size of the heap should be increased,

4   modifying allocation of the shared storage region to decrease the size of the compiled code

5   cache.

1

1   6.   The method of claim 1, wherein modifying the shared storage region based on the

2   first and second determinations further comprises:

3   modifying allocation of the shared storage region to increase the size of the heap if:

4   the second determination indicates that the size of the heap should be increased;

5   and

6

7   a growth need for the heap has existed for at least a predetermined time interval.

1

1   7.   The method of claim 1, wherein modifying the shared storage region based on the

2   first and second determinations further comprises:

3   if the first determination indicates that the size of the compiled code cache should be

4   increased, modifying allocation of the shared storage region to increase the size of the

5   compiled code cache.

1

1   8.   The method of claim 7, wherein modifying the shared storage region based on the

2   first and second determinations further comprises:

3   if the first determination indicates that the size of the compiled code cache should be

4   increased, modifying allocation of the shared storage region to decrease the size of the heap.

1

1   9.   The method of claim 1, wherein modifying the shared storage region based on the

2   first and second determinations further comprises:

3   if the second determination indicates that the size of the heap should be decreased,

4   modifying allocation of the shared storage region to decrease the size of the heap.

1

1   10.   The method of claim 9, wherein modifying the shared storage region based on the

2   first and second determinations further comprises:

3   if the second determination indicates that the size of the heap should be decreased,

4   modifying allocation of the shared storage region to increase the size of the compiled code

5   cache.

1

1   11.   The method of claim 1, wherein modifying the shared storage region based on the

2   first and second determinations further comprises:

3   modifying allocation of the shared storage region to increase the size of the compiled

4   code cache if:

5   the first determination indicates that the size of the compiled code cache should

6   be increased; and

7   a growth need for the compiled code cache has existed for at least a

8   predetermined time interval.

1

1   12.   The method of claim 1, wherein modifying the shared storage region based on the

2   first and second determinations further comprises:

3   if the first determination indicates that the size of the compiled code cache should be

4   decreased, modifying allocation of the shared storage region to decrease the size of the

5   compiled code cache.

1

1   13.   The method of claim 12, wherein modifying the shared storage region based on

2   the first and second determinations further comprises:

3   if the first determination indicates that the size of the compiled code cache should be

4   decreased, modifying allocation of the shared storage region to increase the size of the heap.

1

1   14.   The method of claim 1, wherein:

2   the first feedback includes a code increase indicator to indicate whether the amount of

3   compiled code in the compiled code cache has increased during execution of the program.

1

1   15.   The method of claim 1, wherein:

2   the first feedback includes an eviction rate indicator to indicate a rate at which code has

3   been evicted from the compiled code cache during execution of the program.

1

1   16.   The method of claim 1, wherein:

2   the first feedback includes a compilation rate indicator to indicate a rate at which code

3   has been compiled by a just-in-time compiler during execution of the program.

1

1   17.   The method of claim 1, wherein:

2   the second feedback includes a garbage collection rate indicator to indicate a rate at

3   which unneeded information has been discarded from the heap during execution of the

4   program.

1

1   18.   The method of claim 1, wherein:

2   the second feedback includes an object increase indicator to indicate whether live code

3   remaining in the heap after garbage collection has increased during execution of the program.

1

1   19.   An article comprising:

2   a machine-readable storage medium having a plurality of machine accessible instructions,

3   which if executed by a machine, cause the machine to perform operations comprising:

4   making a first determination, based on first feedback generated during execution of a

5   program, the first determination to indicate whether the size of a compiled code cache

6   should be modified;

7   making a second determination, based on second feedback generated during

8   execution of the program, the second determination to indicate whether the size of a heap

9   should be modified; and

10   modifying a shared storage region based on the first determination and the second

11   determination.

1

1   20.   The article of claim 19, wherein the instructions that cause the machine to modify

2   a shared storage region based on the first determination and the second determination further

3   comprise instructions that cause the machine to:

4   increase the size of the shared storage region if:

5   the first determination indicates that the size of the compiled code cache should be

6   increased; and

7   the second determination indicates that the size of the heap should be increased.

1

1   21.   The article of claim 19, wherein the instructions that cause the machine to modify

2   a shared storage region based on the first determination and the second determination further

3   comprise instructions that cause the machine to:

4   decrease the size of the shared storage region if:

5   the first determination indicates that the size of the compiled code cache should be

6   decreased; and

7   the second determination indicates that the size of the heap should be decreased.

1

1   22.   The article of claim 19, wherein the instructions that cause the machine to modify

2   a shared storage region based on the first determination and the second determination further

3   comprise instructions that cause the machine to:

4   modify, if the second determination indicates that the size of the heap should be

5   increased, allocation of the shared storage region to increase the size of the heap.

1

1   23.   The article of claim 22, wherein the instructions that cause the machine to modify

2   a shared storage region based on the first determination and the second determination further

3   comprise instructions that cause the machine to:

4   modify, if the second determination indicates that the size of the heap should be

5   increased, allocation of the shared storage region to decrease the size of the compiled

6   code cache.

1

1   24.   The article of claim 19, wherein the instructions that cause the machine to modify

2   a shared storage region based on the first determination and the second determination further

3   comprise instructions that cause the machine to:

4   modify allocation of the shared storage region to increase the size of the heap if:

5   the second determination indicates that the size of the heap should be increased;

6   and

7   a growth need for the heap has existed for at least a predetermined time interval.

1

1   25.   The article of claim 19, wherein the instructions that cause the machine to modify

2   a shared storage region based on the first determination and the second determination further

3   comprise instructions that cause the machine to:

4   modify, if the first determination indicates that the size of the compiled code cache

5   should be increased, allocation of the shared storage region to increase the size of the

6   compiled code cache.

1

26. The article of claim 25, wherein the instructions that cause the machine to modify a shared storage region based on the first determination and the second determination further comprise instructions that cause the machine to:

modify, if the first determination indicates that the size of the compiled code cache should be increased, allocation of the shared storage region to decrease the size of the heap.

27. The article of claim 19, wherein the instructions that cause the machine to modify a shared storage region based on the first determination and the second determination further comprise instructions that cause the machine to:

modify, if the second determination indicates that the size of the heap should be decreased, allocation of the shared storage region to decrease the size of the heap.

28. The article of claim 27, wherein the instructions that cause the machine to modify a shared storage region based on the first determination and the second determination further comprise instructions that cause the machine to:

modify, if the second determination indicates that the size of the heap should be decreased, allocation of the shared storage region to increase the size of the compiled code cache.

1   29.   The article of claim 19, wherein the instructions that cause the machine to modify

2   a shared storage region based on the first determination and the second determination further

3   comprise instructions that cause the machine to:

4   modify allocation of the shared storage region to increase the size of the compiled

5   code cache if:

6   the first determination indicates that the size of the compiled code cache should

7   be increased; and

8   a growth need for the compiled code cache has existed for at least a

9   predetermined time interval.

1

1   30.   The article of claim 19, wherein the instructions that cause the machine to modify

2   a shared storage region based on the first determination and the second determination further

3   comprise instructions that cause the machine to:

4   modify allocation of the shared storage region to decrease the size of the compiled

5   code cache if the first determination indicates that the size of the compiled code cache

6   should be decreased.

1

1   31.   The article of claim 30, wherein the instructions that cause the machine to modify

2   a shared storage region based on the first determination and the second determination further

3   comprise instructions that cause the machine to:

4   modify allocation of the shared storage region to increase the size of the heap if the

5   first determination indicates that the size of the compiled code cache should be decreased.

1

1   32.   The article of claim 19, wherein:

2   the first feedback includes a code increase indicator to indicate whether the amount of

3   compiled code in the compiled code cache has increased during execution of the program.

1

1   33.   The article of claim 19, wherein:

2   the first feedback includes an eviction rate indicator to indicate a rate at which code has

3   been evicted from the compiled code cache during execution of the program.

1

1   34.   The article of claim 19, wherein:

2   the first feedback includes a compilation rate indicator to indicate a rate at which code

3   has been compiled by a just-in-time compiler during execution of the program.

1

1   35.   The article of claim 19, wherein:

2   the second feedback includes a garbage collection rate indicator to indicate a rate at

3   which unneeded information has been discarded from the heap during execution of the

4   program.

1

1   36.   The article of claim 19, wherein:

2   the second feedback includes an object increase indicator to indicate whether live code

3   remaining in the heap after garbage collection has increased during execution of the program.

1

1   37.   An apparatus, comprising:

2   a shared storage area, the shared storage area including a heap to store live objects and

3   also including a compiled code cache; and

4   a runtime manager to dynamically modify allocation of the shared storage area between

5   the heap and the compiled code cache.

1

1   38.   The apparatus of claim 37, wherein:

2   the runtime storage manager is further to dynamically modify the allocation based on

3   feedback generated during execution of a software program.

1

1   39.   The apparatus of claim 38, wherein:

2   the runtime storage manager is further to determine, based on the feedback, whether the

3   size of the heap should be modified.

1

1   40.   The apparatus of claim 38, wherein:

2   the runtime storage manager is further to determine, based on the feedback, whether the

3   size of the compiled code cache should be modified.

1

1   41.   The apparatus of claim 40, wherein:

2   the runtime storage manager is to further determine, based on the feedback, whether the

3   size of the compiled code cache should be increased.

1

1   42.   The apparatus of claim 40, wherein:

2   the runtime storage manager is to further determine, based on the feedback, whether the

3   size of the compiled code cache should be decreased.

1

1   43.   The apparatus of claim 39, wherein:

2   the runtime storage manager is to further determine, based on the feedback, whether the

3   size of the heap should be increased.

1

1   44.   The apparatus of claim 39, wherein:

2   the runtime storage manager is to further determine, based on the feedback, whether the

3   size of the heap should be decreased.